What is claimed is:

1. A method of protecting a circuit comprising:

monitoring a zone of protection of the circuit to determine a first topology;

adjusting a zone protective function for said zone of protection based at least in part upon changes to said first topology; and

performing said zone protective function on said zone of protection.

2. The method of claim 1, further comprising:

determining a second topology of the circuit based at least in part upon a state for each of a plurality of power switching devices in the circuit, said state being either opened or closed; and

defining said zone of protection based at least in part upon said second topology.

3. The method of claim 1, further comprising determining said first topology based at least in part upon a state for each of a plurality of power switching devices in said zone of protection, said state being either opened or closed.

4. The method of claim 3, further comprising opening at least one of said plurality of power switching devices in said zone of protection based at least in part upon said zone protective function.

5. The method of claim 4, further comprising:

determining a dynamic delay time for opening said at least one of said plurality of power switching devices in said zone of protection; and

opening said at least one of said plurality of power switching devices in said zone of protection after said dynamic delay time has elapsed.

6. The method of claim 3, further comprising:

monitoring electrical parameters of said zone of protection; and

communicating said electrical parameters over a network to a microprocessor.

7. The method of claim 6, wherein said microprocessor applies an algorithm to said electrical parameters to perform said zone protective function.

8. The method of claim 7, wherein said microprocessor uses a coefficient of said algorithm in applying said zone protective function, and wherein said microprocessor adjusts said coefficient based at least in part upon said changes to said first topology.

9. The method of claim 6, wherein said microprocessor is configured to operate each of said plurality of power switching devices in said zone of protection.

10. The method of claim 6, further comprising generating an open command by said microprocessor in response to said electrical parameters, communicating said open command from said microprocessor to an actuator operably connected to at least one of said plurality of power switching devices, and opening said at least one of said plurality of power switching devices in response to said open command.

11. The method of claim 6, further comprising sensing said electrical parameters with a sensor, communicating signals representative of said electrical parameters to a module, and communicating said signals to said microprocessor, wherein said module, said sensor and said microprocessor are communicatively coupled.

12. The method of claim 11, further comprising:

monitoring said sensor to detect an error in sensing said electrical parameters; and

adjusting said zone protective function based at least in part upon the detection of said error.

13. The method of claim 11, further comprising:

monitoring said module to detect an error in communicating said signals to said microprocessor; and

adjusting said zone protective function based at least in part upon the detection of said error.

14. A method of protecting a circuit comprising:

monitoring the circuit to determine a first topology; and

defining a zone of protection for at least a portion of the circuit based at least in part upon changes to said first topology.

15. The method of claim 14, further comprising detecting a fault in said zone of protection.

16. The method of claim 15, further comprising determining said first topology based at least in part upon a state for each of a plurality of power switching devices in said circuit, said state being either opened or closed.

17. The method of claim 15, further comprising performing a zone protective function on said zone of protection to detect said fault.

18. The method of claim 17, further comprising:

monitoring a second topology for said zone of protection; and

adjusting said zone protection function based at least in part upon changes to said second topology.

19. The method of claim 17, further comprising:

determining said first topology based upon a state for each of a plurality of power switching devices in the circuit, said state being either opened or closed; and

opening at least one of said plurality of power switching devices based at least in part upon said zone protective function.

20. The method of claim 19, further comprising:

determining a dynamic delay time for opening said at least one of said plurality of power switching devices; and

opening said at least one of said plurality of power switching devices after said dynamic delay time has elapsed.

21. The method of claim 19, further comprising:

monitoring electrical parameters of the circuit; and

communicating said electrical parameters over a network to a microprocessor.

22. The method of claim 21, wherein said microprocessor applies an algorithm to said electrical parameters to perform said zone protective function.

23. The method of claim 22, wherein said microprocessor uses a coefficient of said algorithm in applying said zone protective function, and wherein said microprocessor adjusts said coefficient based at least in part upon said changes to said first topology.

24. The method of claim 21, wherein said microprocessor is configured to operate each of said plurality of power switching devices.

25. The method of claim 24, further comprising generating an open command by said microprocessor in response to said electrical parameters, communicating said

open command from said microprocessor to an actuator operably connected to said at least one of said plurality of power switching devices, and opening said at least one of said plurality of power switching devices in response to said open command.

26. The method of claim 21, further comprising sensing said electrical parameters with a sensor, communicating signals representative of said electrical parameters to a module, and communicating said signals to said microprocessor, wherein said module, said sensor and said microprocessor are communicatively coupled.

27. The method of claim 26, further comprising:

monitoring said sensor to detect an error in sensing said electrical parameters; and

adjusting said zone protective function based at least in part upon the detection of said error.

28. The method of claim 26, further comprising:

monitoring said module to detect an error in communicating said signals to said microprocessor; and

adjusting said zone protective function based at least in part upon the detection of said error.

29. A protection system for coupling to a circuit having a circuit breaker, the system comprising:

a control processing unit being communicatively coupleable to the circuit, so that said control processing unit can monitor a topology of the circuit, said control processing unit defining a zone of protection for at least a portion of the circuit based at least in part upon said topology, and said control processing unit redefining said zone of protection based at least in part upon changes to said topology.

30. The system of claim 29, further comprising a network in communication with said control processing unit and the circuit.

31. The system of claim 29, wherein said control processing unit operatively controls the circuit breaker.

32. The system of claim 31, wherein said control processing unit receives parameter signals representative of electrical parameters of the circuit, and wherein said control processing unit opens the circuit breaker in response to said parameter signals if a fault is detected in the circuit.

33. The system of claim 32, wherein said control processing unit applies an algorithm to said electrical parameters to perform a zone protective function on said zone of protection.

34. The system of claim 33, wherein said control processing unit uses a coefficient of said algorithm in applying said zone protective function, and wherein said control processing unit adjusts said coefficient based at least in part upon said changes to said topology.

35. The system of claim 32, wherein said electrical parameters further comprise a state of the circuit breaker, said state being either opened or closed, and wherein said topology is monitored by said control processing unit based at least in part upon said state of the circuit breaker.

36. The system of claim 32, further comprising a module and a sensor, said module being in communication with the circuit breaker, said sensor and said control processing unit, wherein said sensor senses said electrical parameters and communicates said parameter signals to said module, and wherein said module communicates said parameter signals to said control processing unit.

37. The system of claim 36, further comprising a circuit breaker actuator in communication with said control processing unit, wherein said circuit breaker actuator receives an actuation signal from said control processing unit, said actuation signal causing said circuit breaker actuator to open the circuit breaker.

38. The system of claim 37, wherein said control processing unit determines a dynamic delay time for opening the circuit breaker, and wherein said actuation signal causes said circuit breaker actuator to open the circuit breaker after said dynamic delay time has elapsed.

39. A protection system for coupling to a circuit having a zone of protection and a circuit breaker, the system comprising:

a control processing unit being communicatively coupleable to the circuit so that said control processing unit can monitor a topology of the zone of protection, said control processing unit adjusting a zone protective function for the zone of protection based at least in part upon said topology, and said control processing unit performing said zone protective function to detect a fault in the zone of protection.

40. The system of claim 39, further comprising a network in communication with said control processing unit and the circuit.

41. The system of claim 39, wherein said control processing unit operatively controls the circuit breaker.

42. The system of claim 41, wherein said control processing unit receives parameter signals representative of electrical parameters of the circuit, and wherein said control processing unit opens the circuit breaker in response to said parameter signals if said fault is detected.

43. The system of claim 42, wherein said control processing unit applies an algorithm to said electrical parameters to perform said zone protective function.

44. The system of claim 43, wherein said control processing unit uses a coefficient of said algorithm in applying said zone protective function, and wherein said control processing unit adjusts said coefficient based at least in part upon changes to said topology.

45. The system of claim 42, wherein said electrical parameters further comprise a state of the circuit breaker, said state being either opened or closed, and wherein said topology is monitored by said control processing unit based at least in part upon said state of the circuit breaker.

46. The system of claim 42, further comprising a module and a sensor, said module being in communication with the circuit breaker, said sensor and said control processing unit, wherein said sensor senses said electrical parameters and communicates said parameter signals to said module, and wherein said module communicates said parameter signals to said control processing unit.

47. The system of claim 46, wherein said control processing unit monitors said sensor for an error in sensing said electrical parameters, and wherein said control processing unit adjusts said zone protective function based at least in part upon said error.

48. The system of claim 46, wherein said control processing unit monitors said module for an error in communicating said parameter signals, and wherein said control processing unit adjusts said zone protective function based at least in part upon said error.

49. The system of claim 46, further comprising a circuit breaker actuator in communication with said control processing unit, wherein said circuit breaker actuator receives an actuation signal from said control processing unit, said actuation signal causing said circuit breaker actuator to open the circuit breaker.

50. The system of claim 49, wherein said control processing unit determines a dynamic delay time for opening the circuit breaker, and wherein said actuation signal causes said circuit breaker actuator to open the circuit breaker after said dynamic delay time has elapsed.

51. A power distribution system comprising:

a circuit; and

a control processing unit communicatively coupled to said circuit, wherein said control processing unit determines a topology of said circuit, wherein said control processing unit defines a zone of protection for at least a portion of said circuit based at least in part upon said topology, and wherein said control processing unit redefines said zone of protection based at least in part upon changes to said topology.

52. The system of claim 51, further comprising a network communicatively coupled to said control processing unit and said circuit.

53. The system of claim 51, wherein said circuit comprises a circuit breaker, and wherein said control processing unit operatively controls said circuit breaker.

54. The system of claim 51, wherein said circuit comprises a circuit breaker, wherein said control processing unit receives parameter signals representative of electrical parameters of said circuit, and wherein said control processing unit opens said circuit breaker in response to said parameter signals if a fault is detected in said circuit.

55. The system of claim 54, further comprising a module and a sensor, said module being in communication with said circuit breaker, said sensor and said control processing unit, wherein said sensor senses said electrical parameters and communicates said parameter signals to said module, and wherein said module communicates said parameter signals to said control processing unit.

56. The system of claim 54, wherein said electrical parameters further comprise a state of said circuit breaker, said state being either opened or closed, and wherein said topology is determined by said control processing unit based at least in part upon said state of said circuit breaker.

57. The system of claim 54, wherein said control processing unit applies an algorithm to said electrical parameters to perform a zone protective function on said zone of protection.

58. The system of claim 54, further comprising a circuit breaker actuator in communication with said control processing unit, wherein said circuit breaker actuator receives an actuation signal from said control processing unit, said actuation signal causing said circuit breaker actuator to open said circuit breaker.

59. The system of claim 58, wherein said control processing unit determines a dynamic delay time for opening said circuit breaker, and wherein said actuation signal causes said circuit breaker actuator to open said circuit breaker after said dynamic delay time has elapsed.

60. The system of claim 57, wherein said control processing unit uses a coefficient of said algorithm in applying said zone protective function, and wherein said control processing unit adjusts said coefficient based at least in part upon said changes to said topology.

61. The system of claim 51, wherein said circuit comprises a first circuit breaker and a second circuit breaker, said first circuit breaker being downstream of said second circuit breaker, said first circuit breaker having a first current running therethrough and first pickup settings, wherein said control processing unit causes said second circuit breaker to enter a pickup mode as a function of said first current and said first pickup settings when a fault is detected downstream of said first circuit breaker.

62. A power distribution system comprising:

a circuit having a zone of protection; and

a control processing unit being communicatively coupled to said circuit, wherein said control processing unit monitors a topology of said zone of protection, wherein said control processing unit adjusts a zone protective function for said zone of protection based at least in part upon said topology, and wherein said control processing unit performs said zone protective function to detect a fault in said zone of protection.

63. The system of claim 62, further comprising a network communicatively coupled to said control processing unit and said circuit.

64. The system of claim 62, wherein said circuit comprises a circuit breaker, and wherein said control processing unit operatively controls said circuit breaker.

65. The system of claim 62, wherein said circuit comprises a circuit breaker, wherein said control processing unit receives parameter signals representative of electrical parameters of said circuit, and wherein said control processing unit opens said circuit breaker in response to said parameter signals if said fault is detected.

66. The system of claim 65, wherein said control processing unit applies an algorithm to said electrical parameters to perform a zone protective function on said zone of protection.

67. The system of claim 66, wherein said control processing unit uses a coefficient of said algorithm in applying said zone protective function, and wherein said control processing unit adjusts said coefficient based at least in part upon changes to said topology.

68. The system of claim 65, wherein said electrical parameters further comprise a state of said circuit breaker, said state being either opened or closed, and wherein said

topology is determined by said control processing unit based at least in part upon said state of said circuit breaker.

69. The system of claim 65, further comprising a circuit breaker actuator in communication with said control processing unit, wherein said circuit breaker actuator receives an actuation signal from said control processing unit, said actuation signal causing said circuit breaker actuator to open said circuit breaker.

70. The system of claim 69, wherein said control processing unit determines a dynamic delay time for opening said circuit breaker, and wherein said actuation signal causes said circuit breaker actuator to open said circuit breaker after said dynamic delay time has elapsed.

71. The system of claim 65, further comprising a module and a sensor, said module being in communication with said circuit breaker, said sensor and said control processing unit, wherein said sensor senses said electrical parameters and communicates said parameter signals to said module, and wherein said module communicates said parameter signals to said control processing unit.

72. The system of claim 71, wherein said control processing unit monitors said sensor for an error in sensing said electrical parameters, and wherein said control processing unit adjusts said zone protective function based at least in part upon said error.

73. The system of claim 71, wherein said control processing unit monitors said module for an error in communicating said parameter signals, and wherein said control processing unit adjusts said zone protective function based at least in part upon said error.

74. The system of claim 62, wherein said circuit comprises a first circuit breaker and a second circuit breaker, said first circuit breaker being downstream of said second circuit breaker, said first circuit breaker having a first current running

therethrough and first pickup settings, wherein said control processing unit causes said second circuit breaker to enter a pickup mode as a function of said first current and said first pickup settings when a fault is detected downstream of said first circuit breaker.